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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,304	02/23/2005	Xin Wei Gao	FYC 05-1-1	6016
23531	7590	10/18/2006	EXAMINER	
SUITER WEST SWANTZ PC LLO 14301 FNB PARKWAY SUITE 220 OMAHA, NE 68154			HAWK, NOAH CHANDLER	
			ART UNIT	PAPER NUMBER
			3636	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/525,304	GAO, XIN WEI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Noah C. Hawk	3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/23/05</u> .   | 6) <input type="checkbox"/> Other: ____                           |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Umbrella-Type Tent with Locking Ribs.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "two movable blocks for winding the cords" in the lower central head recited in Claim 1, the "connectors" on the lower central head recited in Claim 2, and the grooves on the connectors, the base and cap arrangement of the central head, the racks on the base, the groove-rack relationship, the skirt part, and the relationship between the connectors and the skirt part and rim of the base, all recited in Claims 3 and 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the elements described in paragraph 0012 (the details of the connector/rack/hub relationship) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 recites the limitation "two movable blocks for winding the cords are positioned in a middle part of the base of the lower central head" which is described in the specification but is not shown in any detail the drawings: the drawings appear to show two buttons on a portion of the lower hub. Claims 2 recites the limitation "connectors for hinging the spreaders" on the lower hub, which is mentioned in the specification, but not shown in sufficient detail to enable one of ordinary skill in the art to make the recited elements. Essentially the entire contents of Claims 3 and 8 (the relationship between the connectors, the racks and the hubs) are mentioned in the

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specification, but not shown in sufficient detail in the drawings to enable one of ordinary skill in the art to make the recited elements.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "the central head" in the claims renders them indefinite. It is unclear which central head is being referred to. For the purposes of examination, it will be assumed that the claim refers to the upper central head. Further, the phrase "are fastened to a skirt part of the cap" renders the claim indefinite. It is unclear how the connectors can be attached to a rack and a skirt and be able to hingedly move about the central head. For the purposes of examination and because this relationship is not shown in sufficient detail (see 112(1) and Drawing objections above: it appears in applicant's Figures 2 and 3 that the grooves are pinned to the racks and are not connected to the cap or base at all), no patentable weight will be given to the recitation of the skirt or that the connectors are connected to it.

8. Claims 2, 3, 6, 7, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation of "one connector" or "the connector" in the instant claims renders them unclear. There is a plurality of elements by the applicant and named a connector (the junction piece between the ribs and the

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hubs, the piece labeled 9 in Figure 1 and the piece labeled 14 in Figure 1). Naming multiple elements a connector is misleading and renders the claims confusing. It is suggested that the applicant rename one or all of elements.

9. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the connector" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

 11. Claims 1, 2, 3, 5 and 8<sup>9</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Chai in US Patent 6854476 in view of Smith et al. in US Patent 2864389.

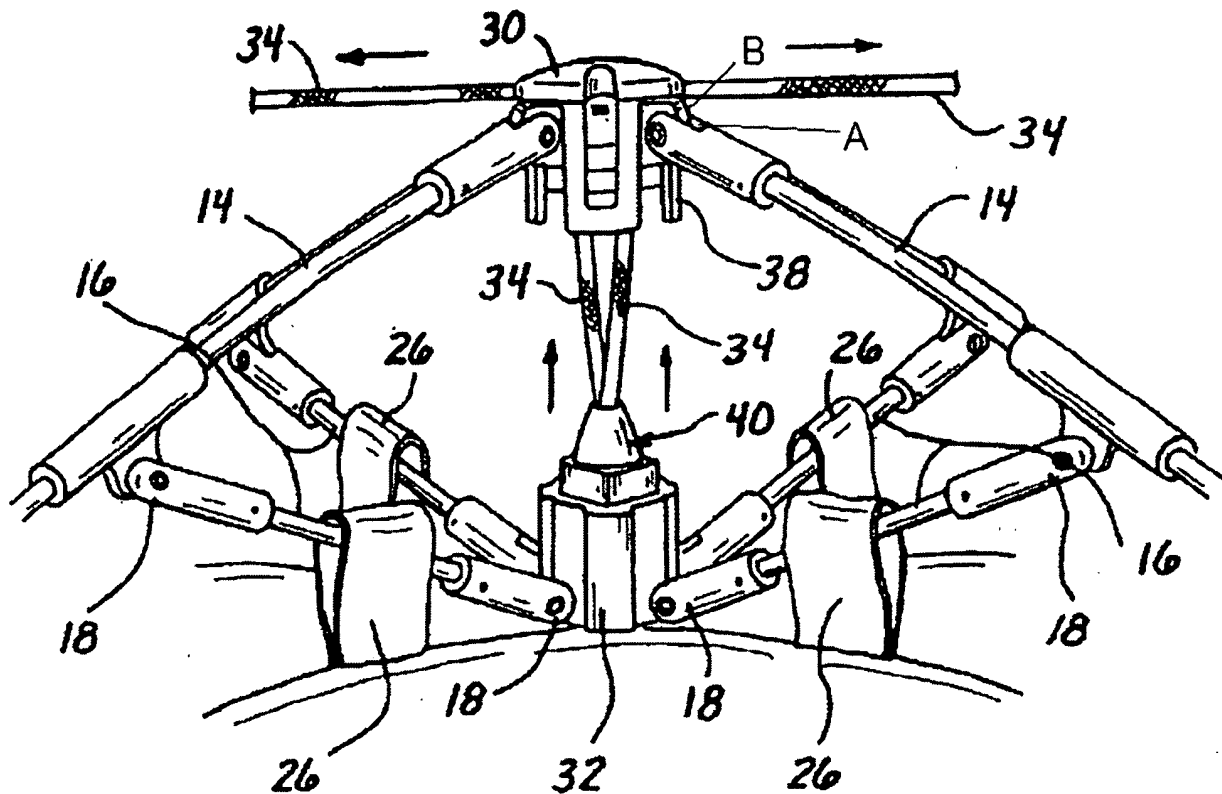
a. Regarding Claim 1, Chai teaches a tent including a frame and a canvas (22) which covers a periphery of the tent frame, the tent frame including an umbrella type frame (Best seen in Chai, Figures 6 and 7) with an upper central head (38) and ribs (14) hinged thereto and a spreader frame (Best seen in Chai, Figure 6) with a lower central head (32) and spreaders (16) hinged at one end to the lower central head and at the other end to the ribs. Chai also teaches two

cords (34) but fails to teach movable blocks in the lower head. Smith teaches an umbrella-type tent with upper (39) and lower (45) central heads having a cord (37) attached at one end (42) to the upper central head, extending around a movable block (48) in the lower head and extending through an opening (41) on the upper central head to the outside. It would have been obvious to one of ordinary skill in the art at the time of invention to use the cord arrangement taught by Smith on the two cords taught by Chai in order to provide a more easily assembled tent.

b. Regarding Claim 2, Chai, as modified, further teaches connectors (18) on the upper central head for hinging the ribs and on the lower central head for hinging the spreaders.

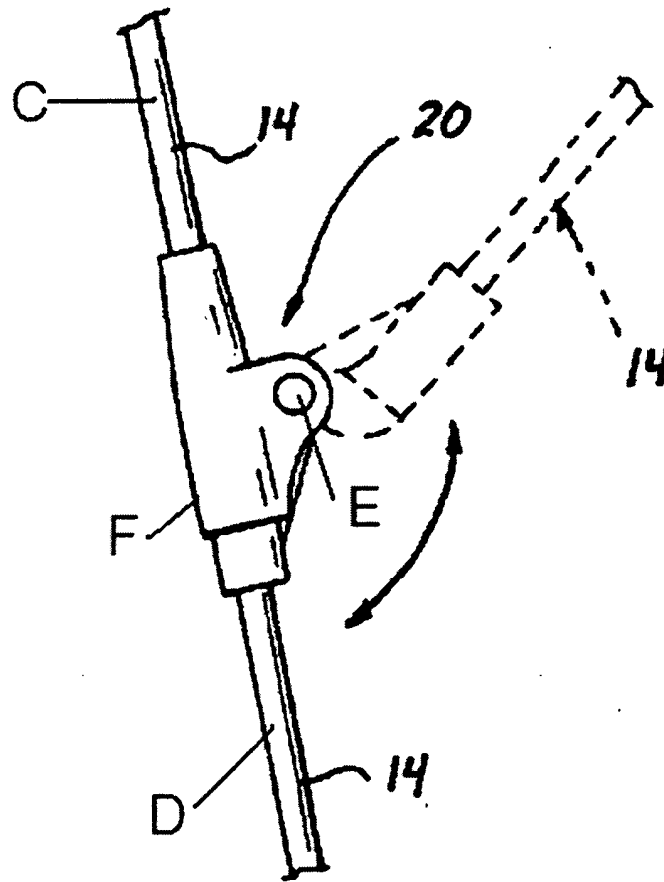
c. Regarding Claims 3 and 8, Chai, as modified, teaches that the upper central head includes a base (38) and a cap (30), the base including racks (A) which are closely coupled with grooves (B) at inner surfaces of the connectors and a protrusion (40) is formed on the lower central head for inserting into an opening in the base of the upper central head (Best seen in Chai, Figures 6 and 7).





Chai '476, Figure 6

- d. Regarding Claim 5, Chai, as modified, further teaches that the umbrella-type frame and the spreaders are composed of short bars (14 and 16, Best seen in Figures 3, 6, and 7) connected to each other.
- e. Regarding Claim 9, Chai, as modified, further teaches that a connector (E) is positioned at a junction of the rib (C) and a short ground supporting bar (D) an upper short bar of the rib is hinged by the connector and a board (F, insofar as the applicant discloses the "board") is positioned on an inner side of the connector to prevent the rib from bending inward.



Chai '476, Figure 4

12. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chai, as modified, as applied to claim 5 above, and further in view of Ham in US Patent 6679643. Chai, as modified, fails to teach a connector with two short joints with a notch and a sliding cover. Ham teaches a connector (Best seen in Ham, Figure 4a) composed of two short joints (20, 30), one having a notch (23) and the other having a sliding cover

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(31) with a convex button (32) for inserting into the notch and a spring (28) for fixing the sliding cover and pressing the convex button into the notch. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the device of Chai, as modified, by using a two-part hinge connector as taught by Ham in order to secure the rib in an unfolded state so that the tent will not collapse at an inopportune time. Chai, as modified, further teaches that a connector (E) is positioned at a junction of the rib (C) and a short ground supporting bar (D) an upper short bar of the rib is hinged by the connector and a board (F, insofar as the applicant discloses the "board") is positioned on an inner side of the connector to prevent the rib from bending inward.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Folger teaches an umbrella-type tent with a groove/rack connection at the hub. Lin, Chai '596 and Chen teach umbrella-type tents. Kim, Ju '646, Ju '551 and Fox 986 teach connectors for hinged rib sections.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Noah C. Hawk whose telephone number is 571-272-1480. The examiner can normally be reached on M-F 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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